BRUHAT BANGALORE MAHANAGARA PALIKE

PROJECT DIVISION YELAHANKA ZONE

DETAILED COST ESTIMATE

Package-01

Name of Work :1. Construction of Govt School rooms, Palanahalli and Kattigenahalli Village in Ward No. 05
Improvements to roads and drains in Agarahara, Agarahara Layout and Surrounding area in Ward No. 05
Improvements to Roads and Drains in Kogilu Layout and Surrounding areas in Ward No. 05
Improvements to Roads and Drains at Tirumenahalli and Surrounding areas in Ward No. 05
Improvements to Roads and Drains From Jakkur double road to Jakkur Village Surrounding areas in Ward No. 05

SL NO	DESCRIPTION	AMOUNT IN LAKHS
1	Construction of Govt School rooms, Palanahalli and Kattigenahalli Village in Ward No. 05	5000000
2	Improvements to roads and drains in Agarahara, Agarahara Layout and Surrounding area in Ward No. 05	5000000
3	Improvements to Roads and Drains in Kogilu Layout and Surrounding areas in Ward No. 05	5000000
4	Improvements to Roads and Drains at Tirumenahalli and Surrounding areas in Ward No. 05	4000000
5	Improvements to Roads and Drains From Jakkur double road to Jakkur Village Surrounding areas in Ward No. 05	3000000
	TOTAL AMOUNT	22000000
	Rupees Two Crore Twenty Lakh(s) Only	

Certificate.

1 The rates adopted based on the PWD SR, Bangalore circle for year 2016-17.
2 The provisions made in the estimate are necessary and essential.
3 The workspot was inspected and work is found to be necessary.
4 The area comes within the Bruhat Bangalore Mahanagara Palike limits.

Assistant Engineer

Asst. Executive Engineer
Project Division
Yelahanka Zone
Bangalore
Asst Executive Engineer
Project Yelahanka Division

Executive Engineer
Yelahanka Division
Executive Engineer
Project Division
Yelahanka Zone
Bangalore

Administrative Approval
Accorded For Rs. 220.00 Lakhs
Head of A/C P-30775
CER NO : 38 Dt: 22/02/2019
E.E. (Project)

Technical Sanction
Accorded For 220.00 Lakhs
Head of A/C P30775
CER NO : TS/06/18-19 Dt: 21.06.18
[illegible] CE (YNK)

(64)

Name Of the Work : Construction of Govt. School Rooms, Palanahalli and Kattigehalli Village in Ward No.05 (Kattigehalli)		
Sl No	**Abstract**	**In Rs**
	School Building with 4 Class Rooms	
1	Civil Works	2378109.00
2	Electrical Works	124965.00
	School Building with 2 Class Rooms	
1	Civil Works	1264821.00
2	Electrical Works	72878.00
	Borewell	
1	Drilling of Borewells	1075264.98
	Total Construction cost	4916037.98
3	Cost Towards PMC / Third party Inspection	73741.00
	Sub Total	4989778.98
4	Misc. & Rounding Off	10221.02
	Total	**5000000.00**

R. Nanjaraj 16/5/2018
AEE/Project-Yelanka

18/6/18

BRUHAT BANGALORE MAHANAGARA PALIKE

Name Of the Work : 1. Construction of Govt. School Rooms, Palanahalli and Kattigehalli Village in Ward No.05 (Kattigehalli)

Sl. No.	Description of work	Unit	No.	Dimensions L	B	D	Quantity	Rate in Rs.	Amount in Rs.
1	KSRB 2-1.1 : Earthwork in surface excavation in Ordinary soil for levelling and lowering the ground manually (other than foundation of buildings, culverts, road drains and trenches of pipe lines and cables) and removing the excavated stuff to a distance not exceeding 50m and lift upto 1.5m, excavated surface levelled and neatly dressed, disposed earth to be levelled after breaking of clods and neatly dressed as per specifications. specification. No. KBS 2.1(a) / 2.3.1 Note : Adopt item 2.24 for excavation in all types of soils for lowering & levelling the ground for building works by mechanical means	Cum							
	(PWD South Zone, BangaloreSR 2016-17 - Item No. - 2.01, Page No.5)								
			1	30.00	19.00	0.10	57.00		
						Say	**57.00**	**169.56**	**9665.00**
2	KSRB 2-2.1 : Earthwork excavation by manual means for foundation of buildings, culverts, water supply and sanitary lines and electrical conduits etc, either in pits or in trenches 1.5m and above in width, in **Ordinary soil** not exceeding 1.5 m. in depth including dressing the bottom and sides of pits and trenches, stacking the excavated soil clear from edges of excavation with lead upto 50 m. including breaking of clods complete as per specifications. No. KBS 2.1(a) / 2.3.5	Cum							
	(PWP&IWTD South Zone, BangaloreSR 2016-17 - Item No. - 2.03, Page No.5)								
	F1								
	SSM								
			10	2.10	2.10	1.60	70.56		
			1	37.60	0.75	0.75	21.15		
							91.71		
						Say	**91.80**	**204.12**	**18738.00**
3	KSRB-3.2: Providing and injecting chemical emulsion for Pre-constructional **Anti-Termite Treatment**, creating continuous chemical barrier under and around the column pits, walls, trenches, basement excavation, top surface of the plinth filling, junction of wall and floor, along the external perimeter of building, expansion joints, over the top surface of consolidated earth on which apron is to be laid, surrounding of pipes and conduits, with chloropyriphos emulsifiable concentrates of 20% concentration, including cost of chemical, diluting in water to one percent concentration, labour, HOM of equipments, complete as per specifications. (Plinth area of the building at ground floor only shall be measured) Specification No. KBS : 3.2.6 / 3.2.7	Sqm							
	(PWD South Zone, BangaloreSR 2016-17 - Item No. - 3.02, Page No.9)								
	Plinth Area								
			1	25.00	7.00		175.00		
						Say	**175.00**	**111.24**	**19467.00**
4	KSRB 4-1.3 : Providing and laying in position **plain cement concrete of mix 1:4:8** with OPC cement @ 180kgs, with **40mm** and down size graded granite metal coarse aggregates @0.85Cum. and fine aggregates @ 0.57Cum. machine mixed, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation, including cost of all materials, labour, HOM of machinery, curing complete as per specifications. Specification No. KBS 4.1, 4.2	Cum							
	(PWP&IWTD South Zone, BangaloreSR 2016-17 - Item No. - 4.03, Page No.12)								
	Footing								
	F1								
	SSM								
	For Flooring		10	1.40	1.40	0.15	2.94		
			1	64.00	0.75	0.15	7.20		

Sl. No.	Description of work	Unit	No.	Dimensions			Quantity	Rate in Rs.	Amount in Rs.
				L	B	D			
	Class Room 1		4	5.80	5.10	0.10	11.83		
	Corridor		1	25.00	1.50	0.10	3.75		
	Flagging Conrete		1	64.00	0.45	0.10	2.88		
							28.60		
						Say	**28.70**	**5256.36**	**150858.00**
5	KSRB 4-1.6 ; Providing and laying in position **plain cement concrete of mix 1:2:4 with cement @ 240kgs, with 20mm and down size** graded granite metal coarse aggregates @ 0.878 cum and fine aggregtes @ 0.53cum, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation, plinth and cills, ncluding cost of all materials, labour, HOM of machinery, curing complete as per specifications. Specification No. KBS 4.1, 4.2	Cum							
	(PWD South Zone, BangaloreSR 2016-17 - Item No. - 4.06, Page No.12)								
	Ground Floor								
	DPC		1	64.00	0.45	0.10	2.88		
	Window Cills - W		12	1.50	0.20	0.10	0.36		
							3.24		
						Say	**3.30**	**5876.28**	**19392.00**
	Terrace								
	Parapet Coping		1	64.00	0.10	0.10	0.64		
						Say	**0.70**	**5984.28**	**4189.00**
6	KSRB 2.5 : **Earthwork excavation in all soil deposits and filling sides of foundation upto plinth in layers not exceeding 20cms.** in depth, compacting each deposited layer by ramming after watering with all lead and lift including cost of all labour complete as per specifications. specification. No. KBS 2.9.9 / 2.9.10.1 / 2.1.1	cum							
	(PWP&IWTD South Zone, BangaloreSR 2016-17 - Item No. - 2.12, Page No.6)								
	Dias		4	3.10	1.30	0.15	2.42		
	Class Room 1		4	5.80	5.10	0.60	70.99		
	Corridor		1	25.00	1.50	0.60	22.50		
	EWE in ordinary soil						91.80		
	Total Filling Qty Required						**187.71**		
	Deduct For								
	PCC for footings, Plinth						-10.14		
	RCC for footings, SSM, Column						-21.65		
							155.92		
	Net Deposited Soil						155.92		
	Add 30% for Plinth Variation						46.78		
							202.70		
						Say	**202.70**	**274.32**	**55605.00**
7	KSRB 4-6.1 : Providing and removing centering, shuttering, strutting, propping etc., and removal of form work for **foundations, footings, bases of columns** for mass concrete including cost of all materials, labour complete as per specificaitons. Specification No. KBS 4.6.2	Sqm							
	(PWP&IWTD South Zone, BangaloreSR 2016-17 - Item No. - 4.28, Page No.15)								
	For PCC Bed								
	F1		10	5.60		0.15	8.40		
	For Footing								
	F1		10	4.80		0.50	24.00		
							32.40		
						Say	**32.40**	**249.48**	**8083.00**
8	KSRB 4-6.4 : Providing and removing centering, shuttering, strutting, propping etc., and removal of form work for vertical surface such as walls at any thickness, including attached pilasters, buttresses, plinth cills and string courses cost of all materials, labour complete as per specifications. Specification No. KBS 4.6.2 (PWD South Zone, BangaloreSR 2016-17 - Item No. - 4.31, Page No.15)	Sqm							
	Below Ground Floor								
	Plinth Beam - alround		1	64.00		0.90	57.60		
						Say	**57.60**	316.44	**18227.00**

Sl. No.	Description of work	Unit	No.	Dimensions L	Dimensions B	Dimensions D	Quantity	Rate in Rs.	Amount in Rs.
9	KSRB 4-6.5 : Providing and removing centering, shuttering, strutting, propping etc., for **columns, pillars, post and struts, square / rectangular/ polygon** in plan including cost of all materials, labour complete as per specifications. Specification No. KBS 4.6.2	Sqm							
	(PWP&IWTD South Zone, BangaloreSR 2016-17 - Item No. - 4.32, Page No.16)								
	Below Ground Floor								
	C1		10	1.40		0.95	13.30		
						Say	**13.30**	395.28	**5257.00**
	Ground Floor								
	C1		10	1.40		2.70	37.80		
						Say	**37.80**	395.28	**14942.00**
10	KSRB 4-6.7 :Providing and removing centering, shuttering, strutting, propping etc., and removal of **form work for sides and soffits of beams, beam haunchings, cantilever girders, bressumers and lintels** not exceeding 1m in depth including cost of all materials, labour complete as per specifications. Specification No. KBS 4.6.2	Sqm							
	(PWP&IWTD South Zone, BangaloreSR 2016-17 - Item No. - 4.34, Page No.16)								
	Lintel								
	Ground Floor		1	61.00		0.50	30.50		
						Say	**30.50**	276.48	**8433.00**
	Roof Beam								
	Ground Floor								
	FB1 - alround		1	64.00		0.95	60.80		
	FB2 - Intermediate		1	25.00		0.80	20.00		
			3	7.00		0.80	16.80		
							97.60		
						Say	**97.60**	276.48	**26984.00**
11	KSRB 4-6.10 :Providing and removing centering, shuttering, strutting, propping etc., for **chajjas, corbels** etc., including edges including cost of all materials, labour complete as per specifications. Specification No. KBS 4.6.2	Sqm							
	(PWP&IWTD South Zone, BangaloreSR 2016-17 - Item No. - 4.37, Page No.16)								
	Ground Floor								
	W		8	1.50	0.60		7.20		
						Say	**7.20**	291.60	**2100.00**
12	KSRB 4-6.2 : Providing and removing centering, shuttering, strutting, propping etc., and removal of form work for **flat surface such as roofs, landings, balconies and likes,** thickness upto 200 mm including cost of all materials, labour complete as per specificaitons.up to 3.50m from Ground level. Specification No. KBS 4.6.2	Sqm							
	(PWP&IWTD South Zone, BangaloreSR 2016-17 - Item No. - 4.18, Page No.15)								
	Ground Floor								
	S1		1	25.00	7.00		175.00		
						Say	**175.00**	338.04	**59157.00**
13	KSRB 4.2.1 : Providing and laying in position **reinforced cement concrete of Design mix M25** with OPC cement @ 340kgs, with 20mm and down size graded granite metal coarse aggregates @0.70 Cum. and fine aggregtes @ 0.47Cum., with super plasticisers @ 3 liters confirming to IS 9103-1999 reafirmed-2008 at machine mixed, concrete laid in layers not exceeding 15 cms thick, vibrated for all works in **foundation for footings, pedastals, retaining walls, return walls, walls (any thickness) including attached pilasters, columns pillars, posts, struts, buttresses, bed blocks, anchor blocks & plinths etc.**, including cost of all materials, labour, HOM of machinery, curing, complete but excluding cost of reinforcement as per specifications. Specification No. KBS 4.1, 4.6	Cum								
	(PWP&IWTD South Zone, BangaloreSR 2016-17 - Item No. - 4.10, Page No.13)								

Sl. No.	Description of work	Unit	No.	Dimensions L	B	D	Quantity	Rate in Rs.	Amount in Rs.
	Below Ground Level								
	Footing								
	F1		10	1.20	1.20	0.50	7.20		
	Plinth Beam								
	Plinth Beam - alround		1	64.00	0.20	0.45	5.76		
							12.96		
						Say	**13.00**	6718.68	**87343.00**
14	KSRB 4.2.7 : Providing and laying in position **reinforced cement concrete of design mix M25** with OPC cement @ 340kgs, with 20mm and down size graded granite metal coarse aggregates @0.70cum and fine aggregtes @ 0.47cum, with superplastisiser @3lts confirming to IS9103-1999 Reaffirmed-2008, machine mixed, concrete laid in layers not exceeding 15 cms thick, vibrated for all works in ground floor level for roof slabs, staircase, lintels and beams retaining walls, return walls, walls (any thickness) including attached pilasters, **columns, lintles, pillars, posts, struts, buttresses, string or lacing courses, parapets, coping, bed blocks, anchor blocks, plain window cills, fillets** etc., including cost of all materials, labour, HOM of machinery, curing, complete but excluding cost of reinforcement as per specifications. Specification No. KBS 4.1, 4.6	Cum								
	(PWD South Zone, BangaloreSR 2016-17 - Item No. - 4.12, Page No.13)								
	Coulmn								
	Below Ground Level								
	C1		10	0.20	0.50	0.95	0.95		
							0.95		
	Ground Floor								
	C1		10	0.20	0.50	2.70	2.70		
							2.70		
	Lintels								
	Ground Floor		1	61.00	0.20	0.15	1.83		
							1.83		
	Roof Beam								
	Ground Floor								
	FB1 - alround		1	64.0	0.20	0.30	3.84		
	FB2 - Intermediate		1	25.0	0.20	0.30	1.50		
							5.34		
	Slabs								
	S1		1	25.00	7.00	0.15	26.25		
							26.25		
							37.07		
						Say	**37.10**	**6876.36**	**255113.00**
15	KSRB 4.2.10 : Providing and laying in position **reinforced cement concrete of design mix M20** with OPC cement @ 24kgs, with 12mm and down size graded granite metal coarse aggregates @0.05175Cum. and fine aggregtes @ 0.0345Cum., with superplastisiser @0.225lts, machine mixed, well compacted for **plain chajja of 7.5 cms. average thickness,** upto ground floor level, including cost of all materials, labour, HOM of machinery, finishing, curing, complete but excluding cost of reinforcement as per specifications. Specification No. KBS 4.1, 4.6	Sqm								
	(PWP&IWTD South Zone, BangaloreSR 2016-17 - Item No. - 4.19, Page No.14)								
	Ground Floor								
	W		8	1.50	0.60		7.20		
						Say	**7.20**	492.48	**3546.00**
16	KSRB 4-2.12 : Extra for providing throating or **drip moulding** to R.C.C. chajja with plastering (labour charges only) as per specifications. Specification No. KBS	m							
	(PWD South Zone, BangaloreSR 2016-17 - Item No. - 4.21, Page No.14)								
	Ground Floor								
	W		8	1.50			12.00		
						Say	**12.00**	21.60	**259.00**

Sl. No.	Description of work	Unit	No.	Dimensions			Quantity	Rate in Rs.	Amount in Rs.
				L	B	D			
17	KSRB 4.9.2 : Providing **T.M.T steel reinforcement for R.C.C work** including straightening, cutting, bending, hooking, placing in position, lapping and / or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM of machinery complete as per specifications. Specification No. KBS 4.6.3 - **TMT bars Fe 500**	Tonne							
	(PWP&IWTD South Zone, BangaloreSR 2016-17 - Item No. - 4.46.2, Page No.17)								
	Below Ground Level								
	Footings	Cum		7.20	60.00	Kg/Cum	432.00		
	Plinth beam	Cum		5.76	125.00	Kg/Cum	720.00		
	Columns	Cum		0.95	200.00	Kg/Cum	190.00		
						Kgs	**1342.00**		
						MT	**1.34**		
						Say	**1.40**	**65455.56**	**91638.00**
	Ground Floor								
	Columns	Cum		2.70	200.00	Kg/Cum	540.00		
	Lintel	Cum		1.83	100.00	Kg/Cum	183.00		
	Beams	Cum		5.34	125.00	Kg/Cum	667.50		
	Slab	Cum		26.25	100.00	Kg/Cum	2625.00		
	Chajja	Sqm		0.54	70.00	Kg/Cum	37.80		
						Kgs	**4053.30**		
						MT	**4.05**		
						Say	**4.10**	**65455.56**	**268368.00**
18	KSRB 5.3-3 : Providing and constructing **granite / trap / basalt size stone masonry in basement with cement mortar 1:6**, edges of stones chistle dressed in courses not less than 15 cms high, bond stones at two m. apart in each course including cost of materials, labour, curing complete as per specifications. KBS 5.1.13	Cum							
	(PWD South Zone, Bangalore SR 2016-17 - Item No. - 5.09, Page No.23)								
	SSM								
	1st Course		1	64.00	0.60	0.20	7.68		
	2nd Course		1	64.00	0.45	0.20	5.76		
							13.44		
						Say	**13.50**	**5405.40**	**72973.00**
19	KSRB 5.4-3 : Providing and constructing **granite / trap / basalt size stone masonry in superstructure with cement mortar 1:6** , edges of stones chistle dressed in courses not less than 15 cms high, bond stones at two m. apart in each course including cost of materials, labour, scaffolding, curing complete as per specifications. KBS 5.1.13	Cum							
	(PWD South Zone, Bangalore SR 2016-17 - Item No. - 5.12, Page No.23)								
	3rd Course		1	64.00	0.45	0.20	5.76		
						Say	**5.80**	**5668.92**	**32880.00**
20	KSRB 15.1.1 Providing flush pointing to **square rubble, course or uncoursed stone masonry with cement mortar 1:3**, 20mm deep, after raking joints to depth of 20mm nicely lining, including cost of materials, labour, curing complete as per specifications.								
	(PWD South Zone, Bangalore SR 2016-17 - Item No. - 15.01, Page No.113)								
	3rd Course		1	64.00		0.20	12.80		
						Say	**12.80**	**104.76**	**1341.00**
21	KSRB 5-14: Providing and constructing **load bearing wall with solid concrete blocks** having block density not less than 1800kg/m3 having a minimum average compressive strength of 4.00 N/mm2 confirming to IS 2185 (Part 1):2005 and constructed with CM 1:4, as per IS 2572:2005 including cost of all materials labour charges, scaffolding, curing, hire charges of machineries etc., complete as per specifications. KBS No.5.4 with solid concrete blocks of size **400x200x200mm**	Sqm							
	(PWD South Zone, Bangalore SR 2016-17 - Item No. - 5.26.1, Page No.25)								

Sl. No.	Description of work	Unit	No.	Dimensions			Quantity	Rate in Rs.	Amount in Rs.
				L	B	D			
	Ground Floor								
	Alround		1	61.00		2.70	164.70		
	Intermediate		3	5.10		2.70	41.31		
	Dias		4	6.50		0.15	3.90		
	Deductions								
	D1		-4	1.05		2.10	-8.82		
	W		-12	1.20		1.20	-17.28		
							183.81		
						Say	**183.90**	**1011.96**	186099.00
	Terrace								
	Dummy Columns		10	0.80		0.75	6.00		
						Say	**6.00**	**1022.76**	6137.00
22	KSRB 5-15: Providing and constructing **non load bearing wall with solid concrete blocks of size 400x100x200mm** having a block density not less than 1800kg/m3 having a minimum average compressive strength of 4.00 N/mm2 confirming to IS 2185 (Part 1):2005 and constructed with CM 1:4, as per IS 2572:2005 including cost of all materials, labour charges, scaffolding, curing, hire charges of machineries etc., complete as per specifications. KBS No.5.4 Page No.25)	Sqm							
	(PWD South Zone, Bangalore SR 2016-17 - Item No. - 5.28,								
	Terrace								
	Parapet Wall		1	64.00		0.75	48.00		
						Say	**48.00**	**784.08**	37636.00
23	KSRB15-3.9 :Providing **18mm thick cement plaster in single coat with cement mortar 1:6,** to brick masonry including rounding off corners wherever required smooth rendering, : Providing and removing scaffolding, including cost of materials, labour, curing complete as per specifications. **(Outside plastering)**	Sqm							
	(PWP&IWTD South Zone, BangaloreSR 2016-17 - Item No. - 15.17, Page No.114)								
	Ground Floor								
	Alround		1	64.00		3.15	201.60		
	Beam Plastering		3	28.00		0.95	79.80		
	Chajja Plastering								
	W		16	1.50	0.60		14.40		
			8	4.20		0.10	3.36		
	Deduction for opening	Coeff							
	D1	0.5	-4	1.05		2.10	-4.41		
	W	0.5	-12	1.20		1.20	-8.64		
							286.11		
						Say	**287.00**	**213.84**	61372.00
	Terrace								
	Parapet		2	64.00		0.75	96.00		
			1	64.00	0.10		6.40		
	Dummy Columns		10	0.8		0.75	6.00		
							108.40		
						Say	**109.00**	**235.44**	25663.00
24	KSRB15-4.4 Extra for providing and mixing **waterproofing compound in cement plaster work at one kg per bag** or in the proportion recommended by the manufacturers, **for cement mortar 1:4, 18mm thick** cost of materials complete as per specifications.	Sqm							
	(PWD South Zone, BangaloreSR 2016-17 - Item No. - 15.26, Page No.114)								
	Ground Floor								
	Qty same as External Plastering						**287.00**	**8.64**	2480.00
	Terrace								
	Qty same as External Plastering						**109.00**	**8.64**	942.00
25	KSRB 15.8.2 Providing and fixing **plaster mesh 150mm wide manufactured** out of hot dipped galvanised iron of nominal thickness 0.35mm with a zinc coating of 120gms per sqm width, along route of walls chipped for services, junction between RCC and brick walls including cost of materials, labour for fixing complete as per specifications. (length of mesh only be measured for payment)	m							

No.	Description of work	Unit	No.	Dimensions L	B	D	Quantity	Rate in Rs.	Amount in Rs.
	(PWD South Zone, Bangalore SR 2016-17 - Item No. - 15.35, Page No.115)								
	Ground Floor								
	Wall to Beam Junction		4	61.00			244.00		
	Wall Column Junction		30			3.00	90.00		
							334.00		
						Say	**334.00**	**36.00**	**12024.00**
26	KSRB15-3.6 : Providing **15mm thick cement plaster in single coat with cement mortar 1:6,** to brick masonry including rounding off corners wherever required smooth rendering, : Providing and removing scaffolding, including cost of materials, labour, curing complete as per specifications. **(Internal Plastering)**	Sqm							
	(PWD South Zone, BangaloreSR 2016-17 - Item No. - 15.14, Page No.113)								
	Ground Floor								
	Class Room		4	21.80		3.00	261.60		
	Deductions	Coeff							
	D1	0.50	-4	1.05		2.10	-4.41		
	W	0.50	-12	1.20		1.20	-8.64		
							248.55		
						Say	**249.00**	**180.36**	**44910.00**
27	KSRB15-3-13 : Providing **12mm thick cement plaster in single coat with cement mortar 1:3, to ceiling** including rounding off corners wherever required smooth rendering, : Providing and removing scaffolding, including cost of materials, labour, curing complete as per specifications.	Sqm							
	(PWD South Zone, BangaloreSR 2016-17 - Item No. - 15.21, Page No.114)								
	Ground Floor								
	Class Room		4	5.10	5.80		118.32		
	Beam Plastering		3	5.10		**0.80**	12.24		
	Corridor Portion		1	25.00	1.50		37.50		
							168.06		
						Say	**169.00**	**208.44**	**35226.00**
28	KSRB 14.10-2: **Flooring with 20 mm thick polished shahabad slabs using cement mortar 1:6,** 25mm thick over existing cement concrete bed or top of roof laid to line and level and jointed with cement slurry mixed with pigment to match the shade of the slab, including cost of materials, labour, curing, polishing complete as per specifications. Specification No. KBS	Sqm							
	(PWP&IWTD South Zone, BangaloreSR 2016-17 - Item No. - 14.16, Page No.103)								
	Ground Floor								
	Flooring								
	Classroom		4	5.70	5.10		116.28		
	Corridor		1	25.00	1.50		37.50		
	At Door Gap		1	1.05	0.20		0.21		
	Window Cills								
	W		12	1.50	0.23		4.14		
	Staircase								
	Risers		22	0.90		0.15	2.97		
	Tread		21	0.90	0.30		5.67		
	Landing		1	1.85	0.90		1.67		
	Skirting								
	Classroom		4	21.60		0.10	8.64		
	Corridor		1	25.0		0.10	2.50		
	Dias		4	6.50		0.15	3.90		
							183.48		
						Say	**184.00**	**1294.92**	**238265.00**
29	Providing **half nosing for 20mm thick granite / shahbad slab** using required machinery including cost and conveyance of all materials, labour for all items of work, HOM of equipment etc., complete as per specification	Rmt							
	(PWD South Zone, BangaloreSR 2016-17 - Item No. - 14.56, Page No.109)								
	Ground Floor								
	Skirting								
	Dias		1	6.50			6.50		
	Staircase Tread		21	0.90			18.90		
							25.40		
						Say	**26.00**	**170.64**	**4437.00**

No.	Description of work	Unit	No.	Dimensions			Quantity	Rate in Rs.	Amount in Rs.
				L	B	D			
30	Providing and finishing **external walls in two coats over one coat of primer with antifungal paint** of approved brand and shade to give an even shade after thoroughly brooming the surface to remove all dirt and loose powdered material, free from mortar drops and other foreign matter cost of materials, labour, complete as per specifications.	Sqm							
	(PWD South Zone, BangaloreSR 2016-17- Item No. - 15.104, Page No.125)								
	Ground Floor								
	Same as External Plastering						**287.00**	**163.08**	**46804.00**
	Terrace								
	Same as External Plastering						**109.00**	**176.04**	**19188.00**
31	Providing applying **two coats of wall putty to inside plastered walls and ceiling** using white cement putty. Scrapping and levelling the surface using steel blade and preparing the surface even and smooth by using different grade sand papers, including cost of all materials, cost of labour and scaffolding etc., complete as per the specification. **(Internal Walls)**	Sqm							
	(PWD South Zone, BangaloreSR 2016-17 - Item No. - 15.106, Page No.126)								
	Ground Floor								
	Same as Internal & ceiling Plastering						**418.00**	**60.48**	**25281.00**
32	KSRB 15-15.1 : Providing and applying painting in two coats with **plastic emulsion paint of approved brand** to give an even approved shade after thoroughly brushing the surface, free from mortar drops and other foreign matter including preparing the surface even and sand paper smooth, cost of materials, labour, complete as per specifications. - with primer	Sqm							
	(PWD South Zone, BangaloreSR 2016-17 - Item No. - 15.51.2, Page No.117)								
	Ground Floor								
	Same as Internal Plastering						**249.00**	**97.20**	**24203.00**
33	KSRB 15-15.1 : Providing and applying painting in **two coats with plastic emulsion paint** of approved brand to give an even approved shade after thoroughly brushing the surface, free from mortar drops and other foreign matter including preparing the surface even and sand paper smooth, cost of materials, labour, complete as per specifications. - with primer KSRB 15-15.2 : Extra over Item 15-15.1 for painting two coats with plastic emulsion paint of approved brand and shade on ceiling and / or sloping roof as per specifications.	Sqm							
	(PWD South Zone, BangaloreSR 2016-17 - Item No. - 15.51.3, Page No.117)								
	Ground Floor								
	Same as Ceiling Plastering						**169.00**	**101.52**	**17157.00**
34	KSRB 15-18.1 : Applying red lead ready mix **priming coat over new steel or other metal surface** including preparing the surface after throughly cleaning oil, grease, dirt and other foreign matter, and scoured with wire brushes, fine steel wool, sand papers including cost of materials, labour, complete as per specifications.	Sqm							
	(PWD South Zone, BangaloreSR 2016-17 - Item No. - 15.73, Page No.121)								
	Ground Floor	Coeff							
	D1	2.2	4	1.05		2.10	19.40		
						Say	**20.00**	31.32	**626.00**
35	KSRB 15-18.2 : Providing and applying **enamel metal paint two coats** (excluding priming coat) **over new steel or other metal surface** brushing to give an even shade after cleaning oil, grease, dirt and other foreign matter, including cost of materials, labour, complete as per specifications.	Sqm							

Sl. No.	Description of work	Unit	No.	Dimensions			Quantity	Rate in Rs.	Amount in Rs.
				L	B	D			
	(PWD South Zone, BangaloreSR 2016-17 - Item No. - 15.74, Page No.121)								
	Ground Floor	Coeff							
	D1	2.2	4	1.05		2.10	19.40		
						Say	**20.00**	**88.56**	**1771.00**
36	**Door Frame - Entrance : Providing & fixing factory made Galvanized plain steel door frame** of profile size 125 x 60 mm single rebate manufactured from galvanized plain steel sheet 1.25 mm thick, conforming to IS:277. The door frame consists of hinge jamb, lock jamb, head & bottom tie bars, supply in knockdown condition & to be assembled at site by mechanical means with special mitre joint. The bottom tie bar made out of galvanized plain steel sheet 1.60 mm thick pressed angle 20 x 20 mm screwed to the door frame. The stiffeners of 3 mm thick pre- punched & pre-trapped are to be welded inside the pre-punched slots of the door frames & 4 nos. of S.S. butt hinges 100 x 59 x 2.5 mm to be screwed to the door frame. The necessary stiffeners & mortar guards to be provided for fixing hardware fixtures. The door frame to be powder coated after pre- treatment of the surface. The door frame shall be filled with 1:3:6 cement concrete & to be fixed with adjustable lugs/ hold fasts. Alternatively, dry fixing shall be permitted by using metallic expansion bolt. The rate is including transportation, loading, unloading, HOM etc. but excluding the hardware fixtures. size 1000 x 2130 mm	Rmt							
	(PWD South Zone, BangaloreSR 2016-17 - Item No. - 38.49.1, Page No.313)								
	Ground Floor								
	D1		4	5.25			21.00		
						Say	**21.00**	**658.80**	**13835.00**
37	Door Shutters Entrance : Providing & fixing factory made **Galvanized steel door Shutters 32 mm thick** manufactured from pre- painted Galvanized plain steel sheet 0.60 mm thick conforming to the IS: 14246. The door shutters consist of two outer skins if steel sheets, lock seam jointed at vertical stile edges, horizontal top & bottom sides to form a double skin fully flush shell. Rigid polyurethane Foam (PUF) of density 40 Kg/M3 shall be filled in the hollow portion of door shutters for structure rigidly & sound insulation. The necessary stiffeners of the Galvanized plain steel sheet of minimum thickness 1.60 mm to be provided **for fixing all hardware fixtures. The rate is including MS Doorlock, MS Aldrop, 2nos of oxidised MS Handles, 2nos. of 300mm longTower Bolt**, transportation, loading, unloading, HOM etc.	Sqm							
	(PWD South Zone, BangaloreSR 2016-17 - Item No. - 38.50.1, Page No.314)								
	Ground Floor								
	D1		4	1.05		2.10	8.82		
						Say	**8.90**	**3812.40**	**33930.00**

No.	Description of work	Unit	No.	Dimensions L	Dimensions B	Dimensions D	Quantity	Rate in Rs.	Amount in Rs.
	KSRB 77 : Providing and fixing in position in **cement** concrete **1:3:6 steel glazed or Unglazed windows** fully openable as per approved drawings using Z angles of 25x33x3mm, weighing 1.419 Kg/m both for outer and inner frames and central mullion section of size 25x46x3mm. weighing 2.28Kg/m duly providing T section 19x19x3mm weighing 0.839 kg/m for glazing of windows not more than 34 cms. c to c including providing and fixing **4mm thick needed glass with teakwood beading of required size or 1mm thick MS Sheet and 11 nos of 10mm square MS horizontal gaurd bars,** all steel sections should confirm to IS 7452:1990, 4nos. of holdfasts of approved size, section should be cut to length welded and electrically grinded subdividing frames of unit shall be tenonned and revetted into the frames electrically.All the steel surface shall be throughly cleaned free of rust and painted with one coat of anti-corosive paint and finishing with two coats of ready mix paint of approved colour and make including cost of materials, fixtur□□□

Internal Electrification								
Description of work	Unit	No.	Dimensions			Quantity	Rate in Rs.	Amount in Rs.
			L	B	D			
Electrical Items								
Supplying heavy gauge PVC Conduit Pipe ....dia .....mm thick with suitable size bends, metal junction boxes adhesive paste etc., by Groove cutting in the wall and fixing by bracing U or J hooks and cement plastering up to the wall surface and run with 18 SWG GI fish wire run throughout the conduit wherever necessary. (Elec SR - 2014-15 - Item No. - 1.3)(Page No. - 2)-**25mm dia 2mm thick**	Mtr					300	57.00	**17100.00**
2	Supplying and **flush mounting teak wooden box** without front plank, made of not less than 12mm thick wood, after due groove cutting, Finishing with necessary cement plastering complete. (Elec SR - 2014-15 - Item No. - 1.6)(Page No. - 3)	Each						
a	10"x7"x3" **(254x178x76mm)** (Elec SR - 2014-15 - Item No. - 1.6.3)(Page No. - 3)	Each					4	87.00	**348.00**
b	8"x6"x3" **(203x152x76mm)** (Elec SR - 2014-15 - Item No. - 1.6.4)(Page No. - 3)	Each					5	68.00	**340.00**
3	Supplying **6A flush** type socket and 6 amps flush type SP switch either surface/flush mounting in existing gang box or in **4mm thick plastic sheet** and fixing over a flush mounted wooden box and wiring using necessary capacity wires as required as per IS 1293 and IS 3654 (Elec SR - 2014-15 - Item No. - 3.1)(Page No. - 15)-**6Amps 3/5 Way**	Each					10	150.00	**1500.00**
4	**Wiring for lighting/power** circuit using one of FRLS PVC insulated 1100V grade, multistrand Copper with low conductor resistance single core wire in open or concealed system of wiring with specified IS-694:1990 & confirming to GTP of GROUP -A. (Elec SR - 2014-15 - Item No. - 2.5)(Page No. - 6)	Mtr							
a	**1.5 sq. mm.** (Elec SR - 2014-15 - Item No. - 2.5.2)(Page No. - 6)	Mtr					400	18.60	**7440.00**
b	**2.5 sq. mm.** (Elec SR - 2014-15 - Item No. - 2.5.3)(Page No. - 6)	Mtr					800	29.20	**23360.00**
	6 sq. mm. (Elec SR - 2014-15 - Item No. - 2.5.4)(Page No. - 6)	Mtr					60	85.40	**5124.00**
5	Supplying **4mm thick plastic sheet** with necessary nitches for fixing switches, regulators etc., and fixing on existing **wooden or metal box using N.F. screws**. (Elec SR - 2014-15 - Item No. - 3.9)(Page No. - 17)	Sqcm					3150	0.25	**788.00**
6	Supply and fixing of **Metal fan hook box**	Each					9	92.00	**828.00**
7	Supplying and fixing regular **MCB distribution boards** on wall / wood board / flush mounting using required clamps, bolts, nuts etc., with provision for fixing suitable type capacity MCB's single phase / 3 phase / single door with powder coated painting etc.,6Way TP&N DB's DD) (P-37, I - 13 B-1)	Each					1	2867.00	**2867.00**
8	Supplying and fixing **miniature circuit breakers** on existing MCB distribution boards using necessary fixing materials and 'C' Type curve, indicator ON/OFF, energy cross-3 with Short circuit breaking capacity of 10K and complete wiring as required confirming to IEC 60898. (Elec SR - 2014-15 - Item No. - 6.16)(Page No. - 47)-**5-32Amps SP**	Each					4	418.00	**1672.00**
9	Supplying, fixing, wiring, earth **electrode for grounding** conduits, I.C. cutouts and other equipment's on the meter board using 40mm dia 2.90mm thick GI pipe 2.5 mtr long buried in a pit ... The pit should be filled with equal proportion of salt and charcoal 150mm all-round the pipe to complete depth. The connection from the pipe to the conduit etc., is to be established through GI wire of size as per ISI specification 7.3.3. of IS 732 using 12mm dia bolts, nuts, washers and check nuts etc., the pipe shall have 16 through holes of 122 mm dia (Elec SR - 2014-15 - Item No. - 7.1)(Page No. - 55)	Each					1	2727.00	**2727.00**

	Description of work	Unit	No.	Dimensions			Quantity	Rate	Amount
				L	B	D		in Rs.	in Rs.
	Electrical Items								
	Supplying and running GI/Copper conductor for **grounding** and (along with other wires in conduit system of wiring) using necessary suitable size clamps, nails, guttas/spacers etc. GI Wire (Elec SR - 2014-15 - Item No. - 7.22.A)(Page No. - 64) # SWG	Mtr					10	19.50	**195.00**
11	Point wiring using Copper wire with switch. Supplying and wiring adopting loop system in existing PVC Conduit / casing capping using 1100V grade, COPPER conductor flexible multistrand FRLS PVC insulated, 2 X1.5Sq.mm Cable confirming to the GTP, with a 6Amps flush type SP control switch shall be fixed on the existing plastic sheet / gang box, the other end of the wires shall be terminated with sufficient loose length in a wood/PVC round block. complete for each outlet. GROUP A (Elec SR - 2014-15 - Item No. - 2.1)(Page No. - 5)-**Short point upto 3Mtr**	Point					10	174.00	**1740.00**
12	Point wiring using Copper wire with switch. Supplying and wiring adopting loop system in existing PVC Conduit / casing capping using 1100V grade, COPPER conductor flexible multistrand FRLS PVC insulated, 2 X1.5Sq.mm Cable confirming to the GTP, with a 6Amps flush type SP control switch shall be fixed on the existing plastic sheet / gang box, the other end of the wires shall be terminated with sufficient loose length in a wood/PVC round block. complete for each outlet. GROUP A (Elec SR - 2014-15 - Item No. - 2.1)(Page No. - 5)-Medium point upto 3Mtr						10	245.00	**2450.00**
13	Point wiring using Copper wire with switch. Supplying and wiring adopting loop system in existing PVC Conduit / casing capping using 1100V grade, COPPER conductor flexible multistrand FRLS PVC insulated, 2 X1.5Sq.mm Cable confirming to the GTP, with a 6Amps flush type SP control switch shall be fixed on the existing plastic sheet / gang box, the other end of the wires shall be terminated with sufficient loose length in a wood/PVC round block. complete for each outlet. GROUP A (Elec SR - 2014-15 - Item No. - 2.1)(Page No. - 5)-Long point upto 3Mtr						10	363.00	**3630.00**
12	Concealed Conduit System Supplying heavy gauge PVC conduit pipe .....mm dia .....mm thick confirming to IS 2509 with suitable size bends, metal/PVC junction boxes, adhesive paste etc., and running before concreting the slab. The conduit should be tied to the reinforcement rods by using binding wires and unused ways of junction boxes and pipe ends should be covered using PVC end enclosures, run with 18SWG GI fish wire wherever necessary (Elec SR - 2014-15 - Item No. - 1.2)(Page No. - 2) - 25mm dia 2mm thick (Elec SR - 2014-15 - Item No. - 1.2.2)(Page No. - 2)	Mtr					250	57.00	**14250.00**
13	Supplying and fixing of **Stepped electronic regulator Scoket** type.(11/29) a) Group A (P-8, I-18 I d)	Each					9	67.00	**603.00**
14	Supplying and fixing **PBBC bakelite straight or slant batten** holder and wiring, within 60w/230 Volts lamps a) Group 'A' (P-13, 1 a)	Each					35	88.00	**3080.00**
15	Supplying of **slim box** type fluorescent fitting, made out of PVC Body with 28W Energy Saving Device, less than 10% T.H.D, pf > 0.90, auto cut off facility locking type holder 1 No of 4'-28W fluorescent tube and completely wired for use on 90V to 350V grade 50 cycle AC supply. (Elec SR - 2014-15 - Item No. - 4.24)(Page No. - 24)	Each					16	670	**10720.00**
16	Supplying capacitor type **ceiling fan** complete with down rod blades, shackle, canopies etc., for operation on 230 volts, 50 cycles. Single phase AC supply conforming to ISS-374-1979 and with double ball bearing system. 48" Sweep (1200mm) (Elec SR - 2014-15 - Item No. - 9.3.1)(Page No. - 78)-**Regular model**	Each					9	2376.00	**21384.00**

	Description of work	Unit	No.	Dimensions			Quantity	Rate in Rs.	Amount in Rs.
				L	B	D			
	Electrical Items								
	Fixing **all types** and all capacities of fluorescent / false ceiling / spot light / CFL / LED fittings indoor on the wall / ceiling / rafters / girders using **23/0.0076" twin twisted PVC** insulated wires, required Nos of round blocks and clamps. (Elec SR - 2014-15 - Item No. - 17.7)(Page No. - 108)-**On wall / ceiling / Rafter / Girders**	Each					16	98.00	**1568.00**
18	Fixing a **ceiling/Wall mounting fan of all capacities** and all types to the existing **S hook** with fan regulator to the existing board together with supplying and fixing a **5 ampers ceiling rose**, necessary length of 23 / 0.0076 inch **PVC insulated twin twisted** copper wire and wiring completely. (P-29, I - 8)	Each					9	139.00	**1251.00**
									124965.00